

ABSTRACT**Bus System having Improved Control Process**

5 The invention provides a bus system comprising a controller (1); a
high speed data transfer bus (2), the data transfer bus being
subject to one or more inherent physical-layer configuration
constraints for proper electrical operation; and a separate control
bus (14). Several devices are connected to the controller through
10 the control bus and the data transfer bus. The controller is
arranged to communicate with devices using the control bus in order
to verify whether or not one or more of the physical-layer
configuration constraints are satisfied. If such configuration
constraints are not satisfied, the controller modifies the operation
15 of some of the devices using control signals transmitted on the
control bus in order to bring the data transfer bus to an operable
condition.

The invention makes it possible to use the bus system, even though
20 physical-layer configuration constraints are violated. The
invention applies to Rambus DRAM buses, where devices may be
disabled to ensure respect of the constraint on the number of
devices.

25 Figure 3.